

Q U A N T A

THE NEWSLETTER OF THE INDEPENDENT QL USERS' GROUP

VOLUME 1 ISSUE 7

AUGUST 1984

CONTENTS

2. Information on the Group
3. Editorial
3. Members' letters
14. MK Workshop
15. Breakout program
17. Sinclair QL to Olivetti D7211
17. Memory dump program
18. Connecting a monitor to the QL
18. QL - Beeb file transfer
19. Books on the QL
20. Microdrives
20. Printer installation
20. Quanta layout
21. Serial and joystick connectors
21. Bus extender
21. QDOS documentation
21. Bits and pieces
23. Book review - "QL Quill"
24. Book review - "QL Easel"
25. IQLUG software library
26. Microdrive problems
27. Quill and INSTALL_BAS
28. Monitors for the QL

INFORMATION ON THE GROUP

Membership of the Group is by subscription to the Newsletter which is published monthly. Membership details are obtainable from the Group Secretary. Membership of the Group is open to anyone with an interest in the Sinclair QL microcomputer.

Members requiring assistance with problems related to the QL may call the Secretary. An attempt will be made to put them in touch with a member who can help with the problem.

Workshops will be arranged from time to time in various parts of the country.

A membership list is obtainable from the Secretary.

Please send all contributions for the Newsletter to the Editor.

Chairman
and Newsletter Editor:-

Leon Heller.
8 Morris Walk.
Newport Pagnell,
Bucks. MK16 8QD.
Tel: (0908) 613004

Secretary and
Newsletter Publisher:-

Brian Pain,
24 Oxford Street,
Stony Stratford,
Milton Keynes.
Tel: (0908) 564271

Software Library:-

Rob Sherratt,
'Betheden',
129 Melford Way,
Cavendish Park,
Felixstowe,
Suffolk IP11 8UH.
Tel: (0394) 272782

SINCLAIR, QL, QDOS, QLUB and ZX Microdrive are Trade Marks of SINCLAIR Research Ltd.

Quill, Abacus, Archive and Easel are Trade Marks of Psion Ltd.

SUB-GROUP CONTACTS

Oxford
Roger MacNichol
(0865) 212701

East Coast (Lowestoft)
Steve Nicholls
(0502) 515881

East London
Ashok Soni
01-472 9966

Edinburgh
Ted Gladstone
031-661 4558

Bristol
J.A. Tanner
(0272) 623401

Birmingham
Malcolm Newport
(0922) 22725

Contacts in other regions are required. Please give Brian a ring.

EDITORIAL

Sorry about the lateness of this issue. I have been rather busy lately.

The Milton Keynes workshop appeared to be very successful. Both Brian and I were nominated at the Inaugural General Meeting, and elected unopposed. Rob Sherratt's position as Software Librarian was confirmed also.

Thanks for the response to the questionnaire. I received 138 completed forms by the cut-off date (Saturday 25 August). A copy of the report that has gone to Sinclair via Tony Tebby will be included in the next issue.

I have literally been inundated with material for the newsletter. Unfortunately, as membership is still rather disappointing in terms of numbers, we have to keep the size down to 28 pages, so a lot of contributions have been held over to the next issue. Brian tells me that the response to our advertisements in PCW has been very poor, and the renewal rate is nothing like 100% so far.

We will have a stand at the PCW Show. Olympia, which is open to the public from Thursday September 20 to Sunday September 23. Brian will be organising a 'hospitality room' at a nearby hostelry. We could do with one or two more volunteers to help man the stand, so please give me a ring if you are interested.

I was successful in the recent Radio Amateurs Examination. and am now the proud possessor of a Class B licence and the call sign G1HSM. You might think that this does not have much to do with computing, but amongst the amateur radio fraternity there is currently a great deal of interest in packet radio, an RF equivalent of the communication networks that are gradually becoming popular for data transfer between computers. Unfortunately, it is not yet legal in this country.

Commencing with the next issue, we shall be trying to get the newsletter printed out on a daisy wheel printer, which should stop the complaints about poor print quality.

Leon Heller

MEMBERS' LETTERS

Many, many thanks for initiating IQLUG. I am more than happy to offer my appreciation and support by sending a cheque for £12 to cover my membership subscription for another 12 months.

I shall be in the US of A at the time of your Milton Keynes workshop, otherwise I should be joining you - particularly for the Sunday programme.

I don't doubt there will be many more...

My immediate needs (they will have to wait until early August now) are for a printer (Canon 1080?) and monitor - colour and sharp 80 col. - but I shall also be interested in a modem and software library. I can't wait for you to share your experience with these peripherals when the time comes.

Until then, my best wishes to you (and to the success of IQLUG.)

Don Riches,
31 Bellwood Road,
Nonhead,
London SE15 3DE.

/* Thanks for the vote of confidence. We do our best. */

As you can imagine, it is very difficult to keep informed whilst working overseas. I have written three times to Sinclair since the QL was revealed in January, but with no response.

Will you please advise me of the current status of the QL:

- is it available retail yet?
- what extra software is available?
- which peripherals are available?

I will be in U.K. early August and hope to buy QL and printer etc. retail since this will ensure compatibility.

Gordon Self,
c/o British Electricity International Ltd.,
P.O. Box 8401,
Rigadh 11482,
Saudi Arabia.

/*Gordon should have got a reply from us with Membership details by return of post. I suppose Sinclair are just not answering enquiries from abroad, since they only supply to addresses in the U.K. His queries will be answered in Quanta as information becomes available. */

I received my QL at the beginning of June and so far I have had the following problems with it.

- 1) Abacus cartridge would not load. The cartridge was eventually replaced by Sinclair Research.
- 2) Sections of the manual were missing which were also replaced.
- 3) Sticky keyboard. Some keys auto-repeat (especially key F).

4) Incredibly noisy power supply unit (it sounds like a beeping Spectrum!) .

I find the manual lacks a lot of detail on the working of the machine and would like to hear the comments of other new owners of this long-awaited machine.

Gerald McLaughlan,
7G North Bute Street,
Coatbridge,
ML5 4HE.

/* You ought to return your system for replacement. The power supply and keyboard are unlikely to improve of their own accord. */

I would need someone to create a Program for me - a stock control/inventory listing type for a stamp collection. I wonder whether someone in IQLUG could do this.

M.C. Gough,
3 Mandeville Close,
Watford WD1 3SF.

/* An ideal application for Archive, in my opinion. */

Like some of your members, I have cancelled my QL order, preferring instead to wait until the beast appears in the shops. By the way, someone told me that W.H Smith and Son is refusing to retail QLs because of Sinclair's marketing fiasco. Is there any truth in this? I doubt it as I have been scanning the computer press fairly closely for news about the QL and have found nothing to that effect.

A problem of monitors. I have a Microvitec Cub (1431/MZ3) which is the model specially modified for the Spectrum. It will also accept 'standard' RGB output from a computer such as the BBC 'B'. I should have known better than to assume that the QL gives a 'standard' RGB output. Long and bitter experience has taught me that Sinclair makes life difficult for his customers if .he can possibly help it! Microvitec tell me that they are producing a model in their 1451 range modified to accept the QL's output. Does this mean that my 1431 will be of no use when I finally purchase my QL? Or, if I buy the 1451, does that mean that I will be unable to hook it up to my Spectrum? I really want a monitor which can be driven by my Spectrum for the time being, and then use it for my QL in the fullness of time. Any advice?

And regarding printer interfaces. I have an Epson FX, to which I am delighted to learn (for a change) the QL is configured. Do you recommend that I

- 1) have a serial card fitted in the printer. **
- 2) buy a Centronics interface
- 3) wait until Sinclair produce their own Centronics interface

M. A. Cuming,
117 Station Road,
Birmingham B14 7TA.

** best option. L.F.H.

Many thanks for the five newsletters received yesterday, I think that somehow issue Three (March) was left on your desk!

I do not intend to re-iterate the complaints regarding the short-comings of Sinclair Research, but will start by complaining about the appalling print quality of the newsletters! I have read all of them already, some with the aid of a magnifying glass, the rest with great difficulty. The member who also thought that a new printer was in order was obviously suffering as well.

Hopefully, this matter will be rectified in due course, together with the QL's problems, so having started well by making friends with the Editor, I would like to say that I really do appreciate the efforts of the founders of IQLUG, and enclose a further cheque to prove it.

Last August, I bought a Spectrum "to see what I could do with a micro", and after playing Scrabble for a while, found that I really did not have time to learn how to write programs for myself. I subsequently bought "Masterfile" which proved to be a very good database program, and decided that I would catalogue my large LP record collection. The only problem proved to be the restriction of 32K storage available.

When the QL advert appeared, it seemed the answer to my problem with it's "98K addressable RAM", so off went my cheque in early February and the long wait began. I received my "AH" at the beginning of July, and being a computer-programmer-illiterate (and English semi!) I was dismayed to find that ARCHIVE was not menu driven as per my old and tried Masterfile. When following the instructions to clone, (page 10) I found that the "Irun" would not run in the quotes! I was suitably impressed, and have now come to accept that the Users Manual has never been checked for accuracy and I am slowly learning to rectify mistakes.

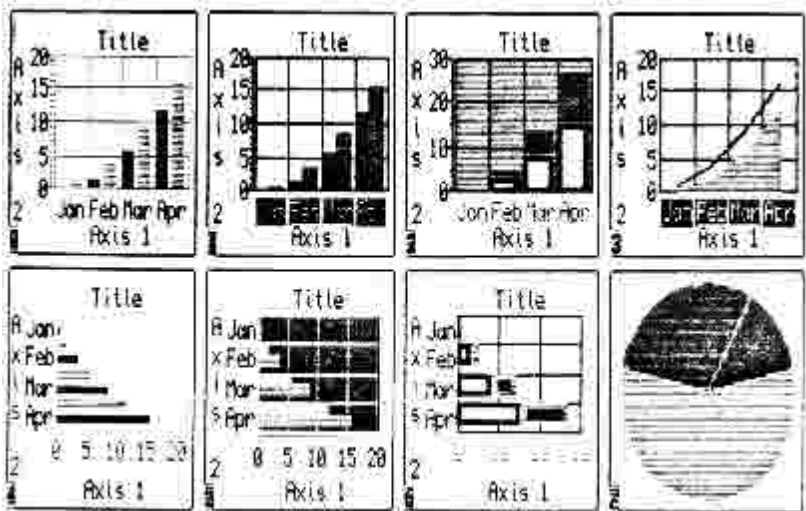
Both Archive and Easel refused to clone. Archive returned "at 210 bad or changed medium" after 25 minutes! Easel returned the same after 5 minutes. Quill took 25 minutes to clone, but it works, as this letter proves. I have this week returned them to Sinclair together with a plea for help in designing a system to produce the "formats" I require from a database to produce lists etc, which it seems I cannot do because of 1 data\$ per line. If any member can help me, I would be pleased to explain what I want to do in some detail, and be eternally grateful.

The son of a friend of mine (also a member) cloned them for me, so I have spent quite some time trying to "crack" the system.

In response to some members requests for information on monitors etc, I have a Fidelity CM14 monitor (£189) which seems to be more than adequate as far as 80 column clarity is concerned, plus it has a 2 watt audio amplifier built in. I am very happy with it, particularly as I was able to alter the screen width to allow me to see the cursor at the left hand edge of the screen. (Another built in QL problem).

This letter is printed on my Canon PW1080A, using the interface supplied by Miracle Systems. Again, I am very pleased with it, and I am sure that when I understand a bit more about computing in general, I will be able to utilise some of the very many features that it offers. It produces graphics by the normal print command and I enclose a sample print out to give you some idea of the quality. This letter is printed using the NLQ mode at 27cps, which as you can see is quite acceptable. The Canon can be obtained from Viglens at £299 Inc. VAT.

Finally, as a "user" and not a genius, I would like to see some procedures in detail for particular applications, for any of the software provided, and "listings" for other applications.



Bill Hook
3, Kinfauns Road,
Tulse Hill,
LONDON SW2 3JJ

Always QUANTA is pretty unputdownable, #6 is no exception and I will certainly be renewing.

QL reviews have spoken of the impossibility of linking QL and Spectrum, enclosed is the way I've done it. The trick is that the QL expects to find chr\$ 10 at the end of a message while a Speccy expects chr\$ 13. All you have to do is to give them what they want! I've found no difficulty in moving a Tasword file line by line and listing them on the QL printer but as yet haven't tried to get it into Quill. The longest single message appears to be about 115 chars long. Has anyone managed to transfer programs?

I've been able to list programs (Mr Cowhig, p.20) by OPEN#15, ser1: LIST#15 lines 320 onwards of attached 'netw' are generally useful in any program.

Re the Miracle interface and Shinwa CP80, the only difficulty is that the de-underline command refuses to do the needful. I've tried adding 128 to the appropriate code as per Shinwa handbook which has worked well in other cases of hiccoughs but to no avail. Re Mr Tanner's letter, I grovel over being too brief over my MIRACLE review.

Someone asked how to show up and down arrows on the screen - well, no one (and certainly not the User Guide) has so far mentioned all those exotic and unprintable goodies between chr\$ 127 and 191, available from the keyboard by using the CNTRL key in combination with others in true Sinclair style. CNTRL SHIFT b is arrow up, CNTRL SHIFT - is arrow down. There are Greek letters, accented letters, diphthongs, upside-down exclamation marks and other signs.

One last point ... if one has to buy software on mdv cartridges It is really not so bad because you need them anyway. Incidentally, a brief loading procedure held on each mdv and named boot enables one to load a program with key presses plus the name of the program.

Keep up the good work!!

"BOOT"

```
100 DIR mdv1_rh
110 INK#0,0: PAPER#0,7
120 CLS#0
130 CLS: PRINT 'll=load program.'\ ss=save new boot.\ 'cc=copy from mdv1 to mdv 2.\dd=dir
mdv1'\dd2=dir mdv2'
140 DEFine PROCEDURE ll
150     dd
160     INPUT 'which programme', a$
170     IF a$="" THEN STOP
180     LOAD mdv1_' & a$
190 END DEFine
200 DEFine PROCEDURE ss
210     DELETE mdv1_boot:SAVE mdv1_boot
220 END DEFine
230 DEFine PROCEDURE cc
240     CLS
250     INPUT 'put COPY-FROM cartridge in mdv1 and enter file name', f$ 260     IF
f$="" THEN DIR mdv1_: GO TO 250
270     IF f$='x' THEN STOP
280     COPY ('mdv1_' & f$ & '_doc') TO (' mdv2_' & f$ & '_doc')
290 END DEFine
300 DEFine PROCEDURE dd
310     CLS
320     DIR mdv1_
330 END DEFine
340 DEFine PROCEDURE dd2
350     CLS
360     DIR mdv2_
370 END DEFine
```

```
5 - GOSUB 10 to receive
GOSUB 50 to send
GOSUB 100 file new version

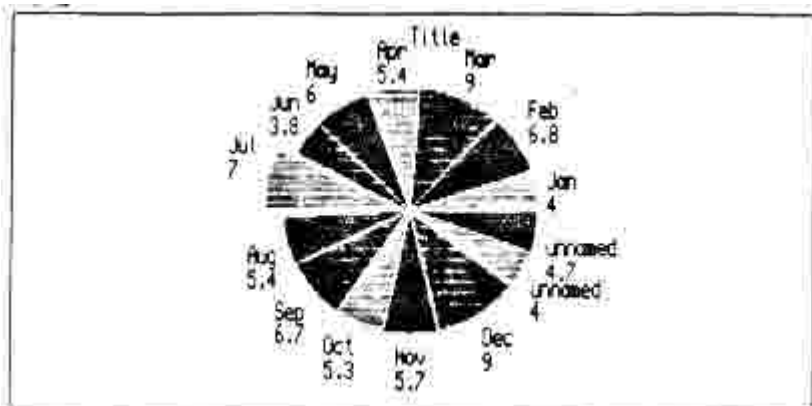
9 STOP
10 OPEN #5: "n"; 1
20 INPUT #5; a$
30 PRINT a$
35 LPRINT a$
40 GO TO 10
45 RETURN
49 STOP
50 OPEN #5, "n", 1
60 INPUT "message ?";a$
70 LET a$=a$+CHR$(10)
80 PRINT #5, a$
90 CLOSE #5
95 RETURN
99 STOP
100 ERASE "m";1;"network"
110 SAVE "m";1;"network"
120 RETURN
```

Spectrum Program

"NETW" PROGRAM

```
100 DEFine PROCEDURE r
110     REMark receive
120     CLS
130     OPEN#4,neti_1
140     INPUT#4,a$
150     PRINT a$
155     PRINT #15,a$
160     CLOSE#4
170     IF a$ (1 TO 4)='over' THEN s
180     GO TO 130
190 END DEFine
200 DEFine PROCEDURE s
210     CLS
220     OPEN#4,neto_1
230     INPUT 'write message',b$
240     IF b$="" THEN STOP
250     b$=b$ & CHR$(13)
260     PRINT#4,b$
270     CLOSE#4
280     IF LEN(b$)<4 THEN GO TO 220
290     IF b$ (1 TO 4)='over' THEN r
300     GO TO 220
310 END DEFine
320 DEFine PROCEDURE ss
330     DIR mdv1_
340     DELETE mdv1_netw
350     SAVE mdv1_netw
360 END DEFine
370 DEFine PROCEDURE 1 (x)
380     LOCAL n
390     n=x*100
400     LIST n TO n+190
410 END DEFine
420 DEFine PROCEDURE oopp
430     OPEN#15,ser1
440 END DEFine
```

J.B. HOLLINGSWORTH M.A.,M.I.C.E
CREUA
LLANFROTHEN
PENRHYNDEUDRAETH
GWYNEDD LL48 6SH
0766-770-534



During the past weeks I have experienced some difficulties with the Psion software i.e. Quill and Abacus but the support that has been offered by this company as a QLUB member cannot be faulted.

Psion advise me that upgrades for Quill and Abacus will be available for QLUB members in the autumn.

I have also received the first issue of the QLUB newsletter which after all this time is very disappointing in its content.

Ralph Horton,
The Swan Inn,
Bradwell,
Nr Braintree,
ESSEX.

Novice in Need

Is there a kind IQLUG member in London who can assist me in getting a Canon PE1080A dot matrix printer to do its tricks? It used to write in draft and the excellent NLQ mode using the Quill printer driver. Now it will not even do that, and I never learned how to instruct its other capabilities. The QL User Manual is particularly terse in guidance for using a printer, and I find the Canon manual utterly mystifying.

Patrick Doorly,
158 Boundaries Road,
London SW12 8HG

First thank you for starting IQLUG. It is clearly going to be of great benefit to members. Rob Sherratt's DUPLICATE problem alone is worth the price of admission.

I am interested in communicating with machine code from SuperBASIC but there seem to be problems apart from the lack of an assembler which hopefully will soon be rectified. The CALL command is o.k. as far as it goes, but as far as I can see it permits only the values of variables to be passed not their addresses. What is required is a SuperBASIC function such as ADR(X) which will return the address of X, and this does not seem to exist. Is it possible to write such a function or is there some other way round the problem. A typical machine code routine which could save a lot of time would be MOVERS(A, B, N) which would simply move the contents of an N long array A into array B. (This is extremely slow in basic). The machine code to do this would be simple and fast but how does one get the addresses of A and B into the machine code program?

Norman A. Macleod,
Mount Pleasant,
Lea Bailey,
Ross-on-Wye,
HR9 5TY
ENGLAND

May I congratulate you and your colleagues on trying so hard with the Newsletter in the teeth of so many difficulties. I wish you would borrow a daisywheel from someone, however!

I have a problem which may turn out to be insoluble. We have a QL and an Apple Macintosh, both ostensibly RS232 equipped, and I want to buy a daisywheel that will run with both machines.

As you know, the Mac has its own graphics printer, the Imagewriter, on which there are several bugs such as omitting spaces in text, but no-one can tell me if, or how, a daisywheel will work.

The manual for the Mac is a Janet and John book, and we do not yet have one for the printer, not that it is likely to tell us much more than how to switch it on.

Do you think there is a safe way to go - is there a daisy that will run on the QL that is at least likely to function with the Mac if and when appropriate software emerges? I never had all this aggravation with my ZX 81!

Can anyone tell me the significance of Line 200 or Line 210, which is where I and others get "Bad Medium" messages from the Psion cartridges? Even two of my replacements still give the message, although they seem to load and run anyway. Are the programs written in Basic?

I have seen references to writing and editing programs in Quill, to take advantage of the editing facilities. How does one go about this? I can see how to write the program, albeit without syntax checking, but how do you then get it out of Quill and into Basic in the machine?

Finally, one bit of, I hope, constructive criticism of the Newsletter. When readers' letters contain queries, would it be possible to answer them or at least comment on them in the same issue? I know the idea is to get the other readers to provide the response, but if this is a month later, I have forgotten the original query. These answers, too, can be highly esoteric from my point of view, since I am too old to learn assembly language, and it would be most helpful to have Mr. Heller's comments in layman's terms.

D.R. Kelsey,
DRK Products Ltd.,
Bar One,
Pipers Lane,
Caddington Common,
Nr. Markyate,
Herts. AL3 8QF

Could someone give advice on this query, please?

I don't like the keyboard on my QL, but do like the one on my Oric Atmos. So would it be feasible to use the Atmos to drive the QL (mainly for word processing)? If so, where would I get hold of the hardware? If not so, have you heard of anybody bringing out a separate keyboard for the QL?

Robert Matthews,
19 Trent View,
Marton Gainsborough,
DN21 5AU

/* Apart from removing the QL keyboard and replacing it by the Atmos keyboard, which might be feasible, you could perhaps construct a serial interface for the Atmos and write some machine language to configure it as a terminal, then control the QL with the Atmos

by connecting the two systems via the serial ports. This would not work with any of the Psion software, however. I don't think it is worth the effort. I would think that someone might produce a proper keyboard for the QL before long, which would solve your problem. */

I have had my QL now for the past three months. The General operation of it seems fine, if a bit slow. The manual is terrible and no good for beginners.

I have a Seikosha GP-250X printer which works fine, and a Kaga Vision II colour monitor which doesn't work so well. Has anybody got any suggestions. Although wired up correctly it displays an off-yellow colour instead of blue, and it over scans on the left. Apart from this the picture is sharp and rock steady. and easily displays 80 columns.

I sent off some queries to Psion about Quill, and got the enclosed letter back. Is this really worth £35? They have supplied no files.

I would be very interested if somebody could tell me how to convert Spectrum add-ons to work on the QL. I have a sound board and a speech board which are both I/O mapped.

Kim Gouldstone,
45 Burleigh Avenue,
Wallington,
Surrey

Let your Sinclair QL teach you to type!



Type faster! - Prepare documents quickly - enter programs effortlessly!
In just a few days, Computer One's new QL TYPING TUTOR will enable you to learn true touch-typing on the Sinclair QL.

The Computer One QL Typing Tutor is a quick and easy way of learning the QL keyboard.

- Self-paced tutorial
- Interactive colour graphics
- Speed tracking
- Error diagnosis
- Comprehensive manual

Price: £35.00

QL Typing Tutor guides the user through a wide range of learning steps using the horizontal and vertical 'horizontal method' as well as Fitts's method.

QL TYPING TUTOR comes with a comprehensive manual detailing the recommended learning sequence and providing a variety of exercises to help to improve your typing technique.

QL TYPING TUTOR has been developed and tested extensively in UK schools and colleges.

ORDER INFORMATION

ORDERING TUTOR: £35.00

NAME _____

ADDRESS _____

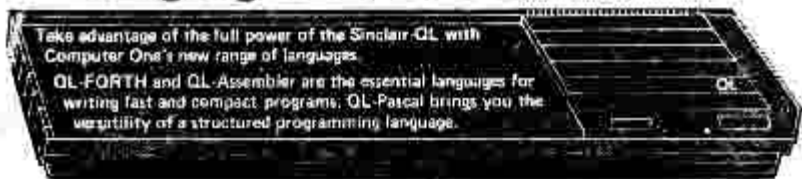
SCIENCE PARK, WILTON ROAD, CAMBRIDGE

/* I think some of your problems with the Kaga monitor are due to incorrect connections. This problem is covered elsewhere in this issue. The over scan is probably due to Sinclair's funny video timings, and I do not believe you can do much about it, without diving into the monitor with a soldering iron. Another member tells me that he gets superb results from his Kaga monitor, however. Give Trevor Smith a ring on (0207) 543528.

A couple of members are quite pleased with the response they have got from Psion. It appears to depend upon the type of query. The more complicated queries seem to get answered individually, whereas other queries receive a computer-generated response, which usually does not match the problem very well.

In theory, it is quite feasible to interface Spectrum add-ons to the QL. The QL requires peripherals to be memory-mapped, and a lot of additional decoding would be required. Frankly, it would probably be easier to start from scratch, using an AY-3-8910 sound chip or SP-0256 speech synthesis chip interfaced directly to the QL expansion bus. I intend to have a go at this in the next couple of months. */

Languages for the Sinclair QL



QL-Assembler <ul style="list-style-type: none"> • 68008 Assembler • Full screen editor • Hexadecimal output • Full syntax checking • Comprehensive manual 	QL-Assembler is a word processor for the Sinclair QL. It allows you to write and edit programs in assembly language. It features a full screen editor, hexadecimal output, full syntax checking, and a comprehensive manual.	QL-Forth <ul style="list-style-type: none"> • FORTH-83 system • Full screen editor • QL graphics & sound extensions • Example games & utilities • 48-page manual 	QL-Forth is a powerful programming language for the Sinclair QL. It is based on the FORTH-83 system and includes a full screen editor, QL graphics and sound extensions, example games and utilities, and a 48-page manual.	QL-Pascal <ul style="list-style-type: none"> • Program Development Environment • Full screen Editor • Comprehensive 48 page manual 	QL-Pascal is a structured programming language for the Sinclair QL. It includes a program development environment, a full screen editor, and a comprehensive 48-page manual.					
<table border="0"> <tr> <td> QL ASSEMBLER £29.95 QL FORTH £29.95 QL PASCAL £29.95 </td> <td> Please send <input type="checkbox"/> by cheque <input type="checkbox"/> by credit card <input type="checkbox"/> by cash on delivery </td> </tr> <tr> <td colspan="2"> TOTAL TO SEND £ </td> </tr> </table>		QL ASSEMBLER £29.95 QL FORTH £29.95 QL PASCAL £29.95	Please send <input type="checkbox"/> by cheque <input type="checkbox"/> by credit card <input type="checkbox"/> by cash on delivery	TOTAL TO SEND £		<table border="0"> <tr> <td> METHOD OF PAYMENT By cheque or credit card Cheque payable to COMPUTER ONE </td> <td> <input type="checkbox"/> by cheque <input type="checkbox"/> by credit card <input type="checkbox"/> by cash on delivery </td> </tr> </table>		METHOD OF PAYMENT By cheque or credit card Cheque payable to COMPUTER ONE	<input type="checkbox"/> by cheque <input type="checkbox"/> by credit card <input type="checkbox"/> by cash on delivery	<p>computer ONE (PVT.)</p> <p>SCIENCE PARK, MILL TON ROAD, DUNDEE, DUNDEE</p> <p>SC01V</p> <p>ADDRESS</p>
QL ASSEMBLER £29.95 QL FORTH £29.95 QL PASCAL £29.95	Please send <input type="checkbox"/> by cheque <input type="checkbox"/> by credit card <input type="checkbox"/> by cash on delivery									
TOTAL TO SEND £										
METHOD OF PAYMENT By cheque or credit card Cheque payable to COMPUTER ONE	<input type="checkbox"/> by cheque <input type="checkbox"/> by credit card <input type="checkbox"/> by cash on delivery									

Milton Keynes Workshop July 1984

This was the first real workshop with real live QLs turning up. It ought to be explained that the Thursday and Friday were spent with Leon Heller doing his 68000 system talk where participants could have wired up their own board by the end of the weekend. That nobody did have the enthusiasm was a pity but there is no reason why this cannot be run again in the future.

What really pleased me was the arrival on time from France of one of our European members Guy Lelage. The other thing that needs explaining is the accommodation. When the weekend was first put together there was no certainty about the Sunday and anybody turning up and recovering hall costs. In the event the turnout was excellent and another hall was hired to ensure room for members. What did spoil things were the acoustics and this hall will not be used again.

In fact there is no reason why the two groups cannot support a week next summer where the location is expandable without any problem. The Tandy Group) has used the site over the last three years and the only problem is the caretaker throwing members out around 11. 00 pm.

The day consisted of talks on ABACUS given by Anil Kuma, ARCHIVE by Chris Cain and Brian Pain. QUILL by Malcolm Newport and Easel by Chris Cain. It must be explained to members that most workshops will consist of talks by other members, where the request may be at very short notice due to a range of unforeseen circumstances.

In the afternoon Tony Tebby went through QDOS explaining, answering questions and advising members of the QLs development and some of its potential directions. The inaugural

meeting was held at the end of the afternoon with the following Main Points of interest.

Leon Heller appointed Chairman and editor. Brian Pain appointed secretary and publisher. Rob Sherratt appointed librarian and Roger McNicholl appointed advertising person. Journal copy to be improved by retyping and reminding members of the quality required. The editor and secretary to be paid. The journal to have sections on ABACUS, QUILL, EASEL and ARCHIVE. Leave the constitution until the AGM in 1985. A summary of the bank account published on a MAILBOX facility for a trial period - Phone number 0582-411842 - account number 12,110 - password 566660 - MAILBOX and then use help. A part membership list made available with name and postal code only. Brian Pain explained the problems of confidentiality.

Brian Pain.

MILTON KEYNES SUNDAY MORNING MEETING FOR A TRIAL PERIOD UNTIL CHRISTMAS 1984 PLEASE MAKE A NOTE THAT WE WILL BE MEETING ON THE FIRST AND THIRD SUNDAYS OF THE MONTH FROM 10. 00 to 1. 00 TO BE HELD AT YORK HOUSE, STONY STRATFORD, MILTON KEYNES. A map can be sent to those faint of heart at the thought of entering MILTON KEYNES.

Brian Pain 0908 564271.

Swindon Workshop 7/8/9 November 1984.

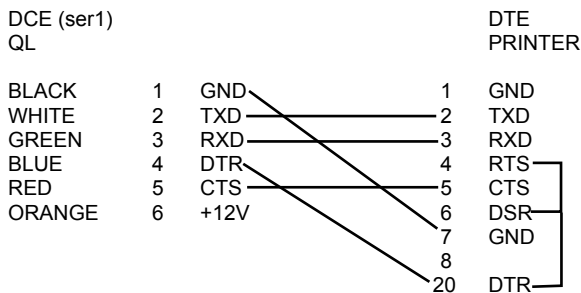
Topics and speakers required.
Contact Leon Heller or Brian Pain
0908-613004 or 0908-564271.

BREAKOUT PROGRAM

```
2 tot=1
5 sys: MODE 8: x1=11: x=19: y=16: a=-1: B=-1: xa=17: ya=17
6 WINDOW 512,256,0,0
8 c=4: wall : bat : move_bat
9 DEFine PROCedure wall
10 FOR i=60 TO 120 STEP 10
20 FOR j=48 TO 432 STEP 32 :BLOCK 28,8,j,i,1/10-5
30 END FOR i
32 PAPER 0
34 END DEFine
40 DEFine PROCedure bat
50 AT x1,22: PRINT "      ":BLOCK 62, 8,(x1+2)*16,220,7
55 END DEFine
57 DEFine PROCedure move_bat
60 IF INKEY$(0)=CHR$(192) THEN x1=x1-2: test1: bat: ball:GO TO 60
70 IF INKEY$(0)=CHR$(200) THEN x1=x1+2: test2:bat :ball:GO TO 70
72 IF INKEY$(0)=CHR$( 32) THEN GO TO 399
75 ball
80 GO TO 60
90 END DEFine
100 DEFine PROCedure test1
102 IF x1=-1 THEN x1=x1+2
105 END DEFine
110 DEFine PROCedure test2
112 IF x1=25 THEN x1=x1-2
115 END DEFine
120 DEFine PROCedure ball
136 spotb x,y,1
137 AT xa, ya:PRINT " ":AT x,y: PRINT "o"
140 IF x<4 OR x>27 THEN LET a=a-(a*2):BEEP 2,7
150 IF y<3 THEN B=B-(B*2):BEEP 2,7
160 IF y>15 THEN spotb x,y+1,2
165 IF y=24 THEN
170 B=ABS (B) - (ABS (B)*2):c=c-1:AT x,y:PRINT " ":x=RND (4 TO 26):FOR i=1 TO
7:BEEP 2,7
171 PAUSE (200):AT 3,1:CLS:score 0
172 END IF
174 IF y<15 AND y>2 THEN spota x-1,y:spota x+1,y:spotb x,y-1,0:spotb x,y+1,0
176 IF c= -1 THEN ends
180 AT 3,1:PRINT "balls=" !FILL$("o",c):score 0
190 xa=x:ya=y
200 x=x+a:y=y+B
220 END DEFine
230 DEFine PROCedure spota (x2,y2)
240 IF (PEEK(131712+(1280*y2)+(4*x2))<>0 OR PEEK(131713+(1280*y2)+(4*x2))<>0)
THEN
242 a=a-(a*2): AT INT((x2+1)/2)*2-1,y2:PRINT " ":BEEP 2,7:score 1
244 END IF
250 END DEFine
260 DEFine PROCedure spotb(x2,y2, switch)
270 IF (PEEK(131712+(1280*y2)+(4*x2))<>0 OR PEEK(131713+(1280*y2)+(4*x2))<>0)
THEN
272 B=B-(B*2): spotc:BEEP 2,7
273 END IF
275 IF ya>22 THEN B=ABS(B)-(ABS(B)*2)
280 END DEFine
290 DEFine PROCedure spotc
295 IF switch=0 THEN AT INT((x2+1)/2)*2-1,y2:PRINT " ":BEEP 2,7:score 1
297 IF switch=1 AND y<15 THEN AT INT((x2+1)/2)*2-1,y2:PRINT " ":BEEP 2,7:score 1
```

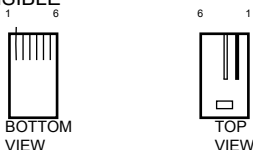
```
300 IF switch=1 THEN a= -a:GO TO 200
305 IF switch=2 THEN B=ABS(B)-(ABS(B)*2)
310 END DEFine
320 DEFine PROCedure score(val)
330 tot=tot+val:AT 17,1:PRINT "score="! tot-1
335 IF tot/92=INT(tot/92) THEN tot=tot+1:GO TO 5
340 END DEFine
350 DEFine PROCedure ends
360 CLS:AT 10,9: PRINT "another game?":AT 11,10:INPUT "y or n"!in$
372 IF in$="y" THEN RUN
375 GO TO 399
377 END DEFine
397 INPUT crap$
399 MODE 4
400 STOP
31001 DEFine PROCedure sys
31010 WINDOW#0,422,30,40,210 /* I haven't a clue where this
31020 WINDOW#1,422,192,40,18 came from! I think it is a
31030 WINDOW#2,422,192,40,18 breakout game, anyway. */
31050 INK#1,4: INK#2,4
31060 MODE 4
31070 CSIZE 1,0
31080 CSIZE#0,1,0
31085 END DEFine
31090 DIR mdv1_
31100 DEFine PROCedure D
31110 DIR mdv1_
31120 END DEFine
31130 DEFine PROCedure REPLACE
31140 DELETE MDV1_BOOT: SAVE MDV1_BOOT
31150 END DEFine
31160 DEFine PROCedure rn
31170 DLINE TO 30999
31180 INPUT prog$
31190 MRUN "mdv1_" & prog$
31200 END DEFine
31210 DEFine PROCedure L
31220 CLS
31230 LIST TO 3000
31240 END DEFine
31250 DEFine PROCedure LL
31260 CLS:LIST TO 30000
31270 END DEFine
31280 DEFine PROCedure LLL
31290 CLS:LIST TO 31000
31300 END DEFine
31310 DEFine PROCedure CLOCK
31320 WINDOW#1,512,256,0,0:CLS:CSIZE 3,1:OVER 0
31330 REPeat i
31340 AT 13,3: PRINT DAY$
31350 LET a$=DATE$
31360 AT 12,5:PRINT a$(6 TO 11)
31362 LET b$= a$(13 TO 14): c$="am"
31363 IF b$>12 THEN LET b$= b$-12: LET c$="pm"
31364 IF b$<10 THEN b$="0"&b$
31367 LET a$(13 TO 14)=b$
31370 AT 10,6: PRINT a$(13 TO)
31380 AT 13,7:PRINT a$(1 TO 4)
31385 AT 19, 6:PRINT c$
31390 IF INKEY$<>" " THEN EXIT i
31400 END REPeat i
31410 WINDOW#1,422,192,40,18:CLS:CSIZE 1,0
31420 END DEFine
```


SINCLAIR QL TO OLIVETTI D7211



QL END PLUG

CONTACTS VISIBLE



Contact at Sinclair:

Mark Cook
Tel: (0276) 686100

Giles Powell,
53 Richford Street,
London W6.

MEMORY DUMP PROGRAM

```

100 RESTORE :CLS:REMark this prints out memory in HEX
110 INPUT "Lineprinter or send to File memo? Enter 1 or 2";g
120 ON g GO TO 130,140
130 OPEN#3,ser1c:GO TO 150
140 OPEN_NEW # 3, mdv_1_memo
150 Z=10000
160 DIM j$(6)
170 FOR f=1 TO 6
180 READ j$(f)
190 END FOR f
200 DATA 'A','B','C','D','E','F'
210 FOR n=0 TO 250
220 k= (PEEK(Z+n))
230 IF k>15 THEN p=INT(k/16) : m=k-p*16 : k=p
240 IF k<=9 THEN PRINT ! k;:PRINT #3,!k;
50 IF k<=15 AND k>9 THEN PRINT ! j$(k-9);:PRINT #3, ! j$ (k-9) ;
260 IF k>15 THEN PRINT! k; :PRINT #3,!k;
270 IF m<=9 THEN PRINT m; :PR INT #3,m;
280 IF m>9 THEN PRINT j$(m-9);:PRINT #3, j$(m-9);
290 END FOR n
300 CLOSE#3
310 REMark copy mdv1_memo to ser1c
320 REMark W T Cowhig 21 Priory Rd. SALE. M33 2BS Cheshire. 061-973-3604

```

Connecting a Monitor to the QL

I noted Francis Cameron's letter in issue 6 concerning the altered display on a late QL. If the machine is connected to a monitor then the differences may be due to incorrect connection on the monitor lead. I had a great deal of trouble connecting my monitor until I phoned Sinclair Research. According to their spokesman the pin connections given for the monitor are incorrect. (They may have been correct for early versions of the QL.) The correct pins are:

Pin	Function
1	Video
2	Ground
3	Not connected
4	Composite sync
5	Vertical sync
6	Green
7	Red
8	Blue

You will see that pins 4 and 5 have been reversed, as have pins 6 and 7. Originally I had my lead wired incorrectly and I was getting incorrect colours and an unstable picture. Colour is changed by wiring pins 6, 7 and 8 correctly but instability is more difficult. According to the spokesman there is no sure fire combination of Vsync and Csync. Some monitors require only one connection, others require both. My Kaga only gives a good (and it is good) picture with Pin 4, Csync, connected.

Noel Williams

QL - BEEB FILE TRANSFER

I have also written a small SuperBASIC program to transfer files from Microdrive to BBC disk drive (I do not altogether trust Microdrives) in Microdrive format with some checking. As I realise few people will have access to both a QL and BBC I am not sure if the QL and BBC programs would be welcome in the software library. Please contact me if you think they would be suitable.

Jeremy Allison,
5 Herdings Road,
Gleadless,
Sheffield,
S12 2LD.

Tel: 0742-993948

BOOKS ON THE QL

<u>Publisher</u>	<u>Author(s)</u>	<u>Title</u>	<u>Date</u>	<u>Price</u>
<u>Century Communications</u>				
	Jeremy San, Fouad Katan & Simon Rockman	"Quantum theory"		
	Andrew Fletcher, Sally Whitehead & Kim Wilson	"Assembly programming made easy on the QL"		£6.95
	Alison McCallum- Varey	"Integrating Abacus, Archive,Easel & Quill"		£5.95
	Claire Spottiswoode	"QL Abacus"		£5.95
	Brad McCallum-Varey	"QL Archive"		£5.95
	Alison Spottiswoode	"QL Easel"		£5.95
	Clare Spottiswoode & Francesca Simon	"QL Quill"		£5.95
<u>Duckworths</u>				
	Simon Craven	"Using the QL"	c.Sept.	
	Adam Denning	"Advanced user guide for the QL"	c.Sept.	
	Peter Gerrard & Kevin Bergin	"Complete Sinclair QL ROM disassembly"		£5.95
<u>Granada</u>				
	Ian Sinclair	"QL computing"	Sept.	
	Berk	"QL SuperBASIC"	Oct.	
	Lewis	"Business uses of the Sinclair QL"	Mar.	
<u>Hutchinson</u>				
	Gary Marshall	"Introducing the Sinclair QL"	Aug.	£6.95
	Dick Meadows	"Introduction to SuperBASIC on the QL"	Aug.	£6.95
	Martin Gandoff	"Advanced programming with the Sinclair QL"	Aug.	£6.95
	Barry Miles	"Desk-top computing with the Sinclair QL"	Aug.	£6.95
	Mike O'Reilly	"Word processing with the Sinclair QL"	Aug.	£6.95
<u>Interface</u>				
	Andrew Nelson	"Exploring the Sinclair QL"	current	£4.95
	Tim Hartnell	"QL Handbook"		
	Dilwyn Jones	"Delving deeper into your Sinclair QL"		
	Paul Toland	"Dynamic games for your QL"		
<u>Longmans</u>				
	Roy Atherton	"Structured programming with QL SuperBASIC"	Aug.	£5.95
	David Dempster	"Word processing with QL Quill"	Aug.	£5.95
	Alan Shinwell	"Your practical guide to QL graphics"	Sept.	£5.95
	Gordon Williamson	"Introduction to QL assembler control"	Sept.	£5.95
<u>Melbourne House</u>				
	Mike Wright	"Using QL Quill"	Nov.	
<u>Pitman</u>				
	Boris Allan	"Sinclair QL companion"	current	£6.95
<u>Sigma Technical</u>				
	Lionel Fleetwood	"Sinclair QL user guide"	Aug.	£7.50
<u>Sunshine Books</u>				
	John Cochrane	"Introduction to simulation techniques on the Sinclair QL"	current	£6.95
	Jeff Naylor & Diane Rogers	"Inside the Sinclair QL"	Aug.	£6.95
	Keith & Steven Brain	"Artificial intelligence on the Sinclair QL"	Aug.	£6.95
	Andrew Pennell	"Assembly language programming on the Sinclair QL"	Aug.	£7.95
	Czes Kosniowski	"Mathematics on the QL"	Aug.	£6.35
	Malcolm Davison	"Developing applications for the Sinclair QL"	Aug.	£7.95
	David Lawrence	"The working Sinclair QL"		£6.95

MICRODRIVES

I was quite lucky with my Psion software cartridges - only one out of the four of them would not load.

R.T. Roadnight, "Cloudshill", 34 Bretforton Rd., Badsey,
Nr. Evesham, Worcestershire, WR11 5UG.
Telephone Evesham (0386) 831120

PRINTER INSTALLATION

In the section in the manual which deals with the connection of RS232 devices (under 'communications' in the "concepts" section) it tells you which pin does what, but it does not tell you to which end of the lead it refers, or what the colours of the wires are. It must refer to the QL end, but this is most unhelpful, as one does not know which pin is which, and any changes would always be done at the D-plug end anyway.

On my Olympia I had to move the blue wire from D pin 20 to pin 4.

R.T. Roadnight, "Cloudshill", 34 Bretforton Rd., Badsey,
Nr. Evesham, Worcestershire, WR11 5UG.
Telephone Evesham (0386) 831120

QUANTA LAYOUT

Presumably the Milton Keynes weekend is reported elsewhere, but one of the issues discussed at the inaugural general meeting was the layout, or lack of it, of Quanta. There seemed to be general agreement that contributors should use a separate paragraph for each topic so that Leon could arrange the magazine in sections, so that, for instance, people who are mostly interested in articles on getting the most out of the Psion packages do not have to wade through pages of 68000 machine code (one of my main interests) to find them: Different paragraphs of this letter should appear in different sections of the magazine. Paragraph headings and names and addresses after each topic section or paragraph (use Quill's copy function) would make it very easy for him to produce a better organised publication with a more detailed and useful contents page: Anybody who has tried to find their way round the QL User's Guide will appreciate how useful a good index or contents page would be. (one appeared in Quanta the other month).

R.T. Roadnight, "Cloudshill", 34 Bretforton Rd., Badsey,
Nr. Evesham, Worcestershire, WR11 5UG.
Telephone Evesham (0386) 831120

/* I agree with Dick's suggestions about the layout of Quanta. Lack of time prevented me from organising this issue in line with his recommendations. I'll have a go for the next issue. */

SERIAL AND JOYSTICK CONNECTORS.

The serial port and Joystick connectors on the back of the QL take rather special plugs, which are intended for use with a special cable. A special press-fit tool is needed to reliably terminate the cable into the plug.

As all this may be a bit too special for the individual hardware hacker, Timedata are selling the plugs terminated with 1 Metre of 6-way cable for £3.00 each inc. post and VAT. Different plugs are used for the serial and Joystick sockets, so specify which one you want. Also. we have a Joystick adaptor, which is a 9-way 'D' connector joined to a QL plug so that standard Joysticks can be used. This sells for £6.00.

Mike Lord,
Timedata Ltd.,
16 Hemmells,
High Road,
Laindon,
Basildon,
Essex SS15 6ED.

BUS EXTENDER

A very useful accessory for prospective QL hardware hackers would be a bus-extender to Plug into the expansion bus. I envisage a piece of PCB Material about 150 MM long, with a 64-way female connector on one end, and a 64-way male connector on the other, connected by PC tracks. It should sell for about £20.

Using such a device, simple add-ons could be developed such as an EPROM Programmer/reader, sound generator, speech synthesiser, etc.

Mike Lord of Timedata is investigating the feasibility of this project, and we might have a prototype for testing quite soon.

Leon Heller

QDOS DOCUMENTATION

Tony Tebby still has some copies of the QDOS documentation available for £30 inclusive:-

Tony Tebby,
QJUMP,
24 King Street,
Rampton,
Cambridge CB4 4QD.
Tel: (0954) 50800

BITS AND PIECES

Jeremy San has written a program in assembler that configures the QL as an intelligent terminal, for use with a 300 baud modem. Due to Sinclair's funny serial port implementation the program cannot be made to work at 1200/75 baud for use on Prestel. It works fine with the bulletin boards. Jeremy will be placing his program in the library.

Chris Cain has developed a relatively low-cost disk drive interface for his QL. The software requires quite a bit of work for a fully operational system, but Chris tells me that the hardware is functioning correctly.

If any members want to build their own modem at a cost of around £30, printed circuit boards and construction notes are available for £7.50 inclusive from:-

Peter Hall,
29 Clyde Road,
Brighton,
Sussex BN1 4NN.
Tel: (0273) 684286

You have to provide your own components, case and power supply. I have one of these modems and can thoroughly recommend it, provided you are handy with a soldering iron. They are ideal for use with Jeremy San's software mentioned above.

EMAP and Sportscene have settled their differences over their rival claims to the title 'QL User'. In future there will only be one QL User publication, emanating from EMAP, although Your Spectrum will continue to have a QL Affairs page, largely written by yours truly.

Sinclair have at last managed to produce the first issue of their QLUB News. I can't say I was impressed, since it consisted of four pages containing equal quantities of 'white space' and text.

Members who have had occasion to use the Psion assistance scheme seem less than impressed. Has anyone got anything good to say about QLUB?

I attended the Metacomco press launch of their editor/assembler package for the QL. They have promised to send me an evaluation copy. Rob Sherratt has had a copy for some time, and quite likes it, except for the fact that the editor can only handle relatively small files. The package will be available in October for £59.

GST of Cambridge will be supplying the official Sinclair editor/assembler. They demonstrated it at the MK workshop, together with their 68K/OS operating system for the QL and everyone was highly impressed. I don't know how much it will cost. One or two members have evaluation copies and tell me that it works very well.

The Sagesoft accounting package will soon be available from Sinclair for the QL. It will probably cost £400! Sage told me that it is not compatible with the Psion software, which seems a bit strange.

Leon Heller

FOR SALE

OKI Microline 80 dot matrix printer. 80 cps. Excellent for WP and listings.

Only £99.

Phone Mark on 021-449 6151, ext.25 (working hours) or 021-443 4783 (evenings and weekends).

BOOK REVIEW

TITLE - QL QUILL (a BLUEPRINT handbook) ISBN 0 7126 0629 7

AUTHORS - Ms F Simon & Ms C Spottiswoode of Blueprint

PUBLISHER - Century Communications Ltd.

PRICE - £6.95

Due for sale in September 1984, "QL QUILL" is the first book in a series of 5 which will cover the complete suite of "business" software which comes free with the Sinclair QL computer. The books claim to be a "thoroughly practical introduction" to the software, appealing to both the beginner and "more experienced" users. Is the claim true ? ...

I found the book appealing, mainly because at last there is an easy-to-read-and-understand reference guide that I can give with confidence to the "beginners" I know who are having difficulty using QUILL on my machine.

Presentation is excellent - a nice clear Table of Contents, a good Index section and even a Glossary called "Quillspeak" at the back. Software documentation has the reputation of being dry and boring, and the authors have gone to great lengths to prevent "QL QUILL" from being just another reference manual that gets consigned to a dusty shelf. The examples and many pictures in the book tell the story of the "Blake family". The very first example is a letter from Nigel to Mr. Blake in which Nigel asks to marry Harold's daughter Amanda. Further examples illustrate many different styles of letters and documents - preparing a Wedding Present list for Nigel and Amanda, and writing business letters for Mr. Blake.

The information on using QUILL seems to be accurate, although I don't claim to have tried all the examples. What is obvious is that this book is a very much better guide to using QUILL than the documentation supplied with the QL; the content, style and accuracy are much better. There was one page of alarming boo-boos in the draft copy I read, and I believe the mistakes will be corrected before the book goes to press - a table of Standard Stationery Sizes is given on page 65 for which about half the sizes are completely wrong. When corrected, however, the table will be very useful because it tells you how to set up margins and line lengths corresponding to these paper sizes for use with QUILL.

I was interested to read the sections on "Installing a Printer" and "Unusual Printers", because I know that many people (including myself) have had difficulty getting pound signs, highlighting, underlining and other "special" features working on their printers. Unfortunately the book is not enlightening in this area, resigning itself to the unhelpful suggestion that you "set up the codes for your own printer" if you own anything more complex than a teletype! What the book should have included was a detailed table for 10 or 20 of the most common printers, showing exactly which function codes are needed.

Having had my little moan, I should say that in almost every other respect the book goes into great detail to explain the use of every feature of QUILL imaginable. I hope that revised editions of the book "QL QUILL" will be brought out to support the upgraded versions of the "QUILL" software when they appear - it is rumoured that a "VIEW" statement will be incorporated to allow document formats to be examined before they are printed, and that the ability to edit "SUPERBASIC" programs from within QUILL will be added, but there was no hint of these additions or even any reference to SUPERBASIC in the book.

Perhaps not surprisingly the authors omitted to mention the scores of serious software bugs that are present in version 1.01 and version 1.02 of QUILL - perhaps this was a penalty the authors paid in order to get the cooperation of Psion (the company who produced the QUILL software) in writing the book. Nevertheless, it is mainly the software bugs which prevent people from successfully using QUILL, and information on where and when the bugs occur could have been extremely useful, even if this information was provided as an appendix.

In conclusion - QL QUILL is well written, well thought out and interesting. It will be invaluable for beginners, and interesting for hardened users of the QL. The information is well indexed and is nearly all there, but certain areas have been skimmed - notably the configuration of printers and the provision of a "bug list" to assist those with early versions of the QUILL software. However, at £6.95 it is good value and provides an essential supplement to the QUILL documentation that comes with the QL computer.

Rob Sherratt

BOOK REVIEW

TITLE - QL EASEL (a BLUEPRINT handbook) ISBN 0 7126 0630 0

AUTHORS - Ms A Spottiswoode of Blueprint

PUBLISHER - Century Communications Ltd.

PRICE - £6.95

"QL EASEL" is the second book in a series of 5 which cover the complete suite of "business" software which comes free with the Sinclair QL computer. The first book "QL QUILL" has already been reviewed - and the style and presentation of the "QL EASEL" book is consistent and as good as that for "QL QUILL".

The continuing story of the "Blake family" is told in the examples and pictures that are given throughout the book. Mr Blake runs a toy manufacturing business, and the first few graphs produced using EASEL are for sales of a new toy - Lawrence Lizard. Mrs Blake seems a bit paranoid about the fuel consumption on her Renault and spends her free time constructing graphs of miles, litres, gallons and mpg each month. Then there's Miranda Blake, a

solicitor, who (true to form) is very keen to keep a yearly record showing the growth of her salary and fees charged. I think she ought to ask her employer for more than a 25% cut of the fees, though!

Other examples in the book, all produced directly from EASEL on an FX80 printer, illustrate very nicely the art of producing graphs and charts of all shapes, sizes and colours. We are shown when a certain type of graph is useful from a statistical point of view, and when it should be avoided. There will be many "experts" who will find new ideas and uses for EASEL after they have read the hints and tips given in this book.

I was particularly interested in the later sections of the book which deal with printing and taking photographs of graphs, and how to import and export data between EASEL and ARCHIVE or ABACUS. The section on printing confirms that present releases of EASEL can only print to FX80 compatible printers, and I suppose I cannot criticise the book for limitations in the software. However, a source code listing of the graphics dump program which EASEL calls when printing to an FX80 printer would have enabled people to generate programs for use with their own printers that are not FX80 compatible. A pity that the author had not included such a listing in an Appendix.

Nevertheless, QL EASEL is a good book. Most readers who use QL EASEL will feel it is £6.95 well spent, although if you don't own an FX80 compatible printer, your troubles are not over yet!

Rob Sherratt

IQLUG SOFTWARE LIBRARY

The software library now exists with 15 or so useful "utility" type programs that have been submitted by members of IQLUG. My grateful thanks to all of you who have donated programs so far. Please don't stop at one! I will publish a full list of programs with details on how to run them next issue.

At the last Stony Stratford meeting of IQLUG which many members attended, Tony Tebby (designer of QDOS) kindly donated the entire day to answering and giving a presentation on various aspects of QDOS. He also brought some useful machine code utilities with him, and many members asked whether these could be obtained via the Software Library. The arrangement reached is that Tony will be supplying me with his programs once copyright problems have been straightened out. I will let members know, via Quanta, when this has happened. Tony's programs will cost £1.00 (supply your own cartridge). Again, I will publish a list of what these programs are and how to run them when I know myself!

I must apologise to the 30 or so people who have sent me cartridges and requests for copies of the IQLUG software library during the last 3 weeks. The reason I have not been able to supply copies is because my QL microdrives were faulty, and SINCLAIR are supposed to be repairing them. I sent the QL back on 30th July and have had no joy out of SINCLAIR to date, despite 4 'phone calls from me pestering them. The "returns procedure" in the QL manual states that faulty machines will be repaired or replaced within 2 weeks

(ah yes sir, two weeks, that is if you live on Pluto) so like a fool I actually believed what I read. I hope that, like me, those waiting for their IQLUG programs can be patient with SINCLAIR yet again!

For anyone else who wants to join the queue, the procedure for obtaining a copy of all programs in the library is :

Send a formatted, blank Microdrive cartridge to me in a small Jiffy Bag (no need to send the cardboard box the cartridges are sold in).

Enclose a short letter giving your name, address' and phone number, together with an assurance that you will use the IQLUG programs for your own use only and will not attempt to publish, copy or redistribute them yourself.

Enclose a cheque for £1.00 made payable to QJUMP if you want to hang on for the Tony Tebby machine code programs.

Enclose a gummed, self-addressed label and return postage.

My normal response time will be 1 to 2 weeks, depending on how much I need to use my QL for doing "my own thing". If any member lives in the Suffolk area and is prepared to help with the library, then I would be very grateful. Once again, sorry to those who have been anxiously waiting for their programs - I will do the copying as soon as my QL is returned by SINCLAIR.

Rob Sherratt

MICRODRIVE PROBLEMS

Rob Sherratt tells me that his replacement QL, like the first one he returned to Sinclair because mdv2 stopped working after the machine had been on for a couple of hours, suffers from the same fault. It appears that some of the chips that control the microdrives are heat sensitive. This problem will obviously affect Mdv2 more than Mdv1 because the second drive is closer to the power supply, and therefore gets hotter. Could any other members, that are experiencing this problem send e a note with full details, such as length of time after the machine is switched on, type of error reported, etc. We might then be able to get Sinclair to do something about it.

Leon Heller.

QUILL AND INSTALL_BAS

I am not very familiar with these programmes, and typing this letter is the first thing that I have done with them (or the computer either). This makes me better qualified to comment on it than people who have used it for a while. They have got used to it's irritations and shortcomings, and to looking out of the window for long periods while it re-formats the screen.

This package has some useful features, but it is too slow for professional use: You do not have to be a competent typist to find that you can get many characters ahead of it, and lacks many features that one should be able to take for granted - eg:

It should centre a line without having to set a centre type tab in the middle of the page, which is what I did here.

Paragraph indentation should take the indent margin with it, so that the preset indent margin is then relative to the paragraph inset margin.

There should be a date function which prints the current date where you tell it to - or is there one - I could not find it!

Install-bas should cater for real printers, which have 35 non-standard functions, and not just the 8 which it now caterers for. Most word processors overcome this problem by allowing you to send any control character you want to the printer, without the word processor knowing what function it is supposed to activate. Unfortunately the claim that "what you see on the screen" (within a few minutes of you keying it in) "is what it will look like on the finished page". This prevents them permanently displaying the control characters on the screen, but they could be recalled or suppressed from one of the menus. The basic routine which I used to format this printer (Olympia ESW 102) from my Epson HX20 used 19 control codes to format it. Install_bas is supposed to be able to allow you to use up to 10 codes, but mine would not. I have tried to send control characters by using ASCII characters 128 - 160. My printer will only recognise 7 bits, so the 8th might have been ignored, leaving a seven bit control code, but this does not work, as Quill will not accept 8 bit ASCII codes. This seems illogical, as there is, in basic, over 200 ASCII characters, most of then displayable, and these would have been very useful for technical reports etc. A routine could have been incorporated for graphic printers to copy the screen, pixel for pixel.

When I first set up my printer using Install-bas it would not accept 'def (which makes a daisy wheel printer backspace to underline etc.) (it now works) has anybody else had similar problems?

Another useful function would be vertical justification, which would automatically insert forced page breaks at the ends of paragraphs, and select a line spacing that would still exactly fill the page. On this Olympia the line spacing can be adjusted in increments of 1/96th off an inch.

I have got the linefeed reverse function to work on the 'translate 2' function. One can print in more than one column by using the tab function, but to get auto carriage return in a column of text with another column or remarks alongside is not easily done with cheap printers and word processing packages (if it is possible - it was with the BASIC word processor which I wrote for my Epson HX20). Using linefeed reverse one can print one column, linefeed up the page, reset the margins and print another justified paragraph alongside. Another function that my printer has is vertical tab reverse, which could be used to print a whole A2 page in as many columns as you like. Setting the margins on the printer also helps to overcome the restriction of a maximum right margin setting of 160. This Olympia has a maximum printed line width of 14 inches, which is 210 characters on 15 cpi, which is very useful for tables and accounts. I hope that ABACUS can print over 200 character columns, and it will be an indication of the quality of the documentation that I have just spent about half an hour in a vain attempt to find out!

I have not tried to use the proportional mode and daisy wheel with Quill, nor the programme mode, which can give proper justification, with the spaces between the letters in each word being adjusted, and not just the number of spaces between words. It looks as if I will have to incorporate some extra functions into Quill, or re-write my own 'BASIC' word processor in 68000 machine code. This is very versatile in that one of the functions in it is 'GOSUB line number', so that anybody could write their own basic subroutine (sorry DEFined PROCEDURE) to include a table, picture, computer-aided design or anything else along side the text!

R.T. Roadnight, "Cloudshill", 34 Bretforton Rd., Badsey,
Nr. Evesham, Worcestershire, WR11 5UG.
Telephone Evesham (0386) 831120

MONITORS FOR THE QL

On page 5, M.A. Cuming asks whether he can use the same monitor for his Spectrum and QL. I rang Microvitec, and they told me that firstly, their monitor for the Spectrum cannot be used with the QL, and modifying it would not be cost-effective. Secondly, their QL-compatible monitor will not work properly with the Spectrum. Digivision, however, tell me that their monitor for the QL is adjustable via a set of controls, so it might be possible to use it for both computers. Digivision's 'phone number is (0533) 351224. Digivision had some of their monitors at the MK workshop and the quality seemed excellent. A Sanyo monitor I borrowed gave a superb display, but it was one of the more expensive high resolution models.

Leon Heller.